

The Influence of Culture on Attitudes towards Humorous Advertising

Yi WANG¹, Su LU^{*2}, Jia LIU^{1}, Jiahui TAN¹, Juyuan Zhang¹**

1. Business School, Central University of Finance and Economics, Beijing, China, 100081

2. Business School, University of International Business and Economics, Beijing, China, 100029

*** Equal First Authorship:**

Su LU

lu.su0709@gmail.com

*** *Correspondence:**

Jia LIU

silvia8924@126.com

Abstract: Humor has been widely used in advertising in recent decades. Various studies found that humor could significantly improve advertising performance. However, most of these studies were conducted in western context and did not consider cultural factors. In a cross cultural research framework, the current study explored the effects of advertisement characteristics (i.e., brand nationality and humor tactics) on Chinese and US audiences' attitudes towards humorous advertisements. Results showed that the attitudinal differences between Chinese audience and US audience was not significant at the aggregate level. Instead, the differences lie in audience' s responsiveness to characteristics of the ads. Specifically, whereas US audience showed a strong preference for ads of Chinese brand to those of US brands, Chinese audience did differentiate them. Whereas US audience preferred ads using self-enhancing tactics to those using affiliative tactics, again Chinese audience didn' t differentiate. We also explored whether individual differences in cultural values could account for the effect of audience nationality. Results suggest that differences embedded in culture groups, as indicated by audience nationality, could not be explained or substituted by individual variance in humor tolerance and uncertainty avoidance. Limitations and future directions were discussed.

Key Words: Culture; Humor; Brand; Humorous Advertising; Advertising tactics

1 Introduction

Every year, Clio Awards, the Oscars of advertising, set an award named “Best Use of Humor” (Buijzen, 2004). This shows that not only have using humor been a common practice in the advertising business, but also been highly recognized of its economic values in commercials. Indeed, in the recent years, using humor in advertising has become a common practice worldwide (Duncan, 2011). Nearly 36% of TV commercials in UK use humor appeals, and 24% of TV commercials, 31% of radio advertisements and 15% of magazine advertisements in USA contain elements of humor (Eisend, 2018).

In China, the application of humorous advertising seems to be conservative and limited. For example, there is a popular lemon drink advertisement conducted by a very famous American brand. In this printed advertisement, in order to show the original taste and flavor of the drink, an anthropomorphic lemon is standing on the edge of the cup and peeing into the lemon drink. It has achieved good communication effects among Western audiences, but many Chinese audiences feel uncomfortable about it.

This discomfort exists because people in different cultures hold strikingly different attitudes towards humor (Kuiper et al., 2010; Yue et al., 2016) and humorous advertising (Hatzithomas, Zotos, & Boutsouki, 2011). Whereas Western audiences hold a positive attitude towards humor, Chinese audiences hold a subtle negative attitude towards humor (Yue, 2010). Consequentially, in the Western countries, people regard humor as a common and positive disposition for everyone, and humorous advertisement has been used in marketing practices in all kinds of media (Weinberger, 1992). While in China, people view humor as a personality trait possessed exclusively by specialists in humor-related fields (Yue, 2010), and only a quarter of Chinese commercial advertisements use humorous elements (Hu, 1998), most of which appear in emerging online advertisements (Zhou, 2008).

Despite the prevalence of humor appeals in advertising industry, little attention has been paid to the attitudinal differences of humorous advertisements in a cross-cultural framework (Hatzithomas et al., 2011), less do we know how characteristics of an ad interact with cultural factors. Do audiences from different cultural contexts hold different attitudes towards the same humorous advertisement? If yes, could these differences be explained by individual differences concerning cultural values? To answer the above questions, we compared evaluations of audiences from different cultures concerning advertisements varying in brand nationalities and tactics.

2 Literature Review

Although the cultures of the West and East are similar in humanistic structure and value, they hold different attitudes towards humor (Alden et al., 1993). People from western maritime culture are open and forthright, and they regard humor as a common positive and optimistic character, which is usually associated with positive words (Yue et al., 2016). While people from Chinese culture are deeply influenced by traditional Confucianism, are reserved, advocate the golden mean, and consider public humor as

less elegant and decent (Jiang et al., 2011; Yue, 2010). This leads to their differences in attitudes towards humorous advertising.

2.1 Attitudes towards Humorous Advertising

Since the 1960s, American companies have come to realize that audiences deeply resent the intrusion of advertising and marketing interruptions and that these could be ameliorated by humor factors, which eliminate prejudice and alert, induce positive moods, and convey advertising purposes unwittingly (Spotts, 1997). As a result, humorous advertising received more and more attention from the academia. Sternthal (1973) firstly explored the usage of humor in advertising and found that humor increased audiences' attention and advertising performance. Scott (1990) argued that humor could induce a pleasant cognitive or emotional response by comparing the expected with the unexpected. Beard (2005) suggests that a proper humorous advertisement can not only delight audiences, but also reduce audiences' bad impression on the brand or product, attaining the goal of advertisements.

Humorous advertising can stimulate audiences' positive sentiment and induce them into highly advertisement engagement, resulting in a more positive attitude (Chattopadhyay and Basu, 1990; Eisend, 2011). Nonetheless, people from the Chinese culture do not think humorous advertising as a creative marketing method (Yue, 2010). In a cross-cultural research framework of humorous advertising, the researchers noticed two interesting questions: Does the audience have different attitudes to humorous advertisements from different countries? Does the audience have different attitudes to humorous advertisements with different humorous advertising tactics? These two questions are widely concerned by both advertising researchers and advertisers in the advertising tactics decision process.

2.1.1 The role of brand nationality

Because of differences in culture, habits of thought, and market environments in China and the West, humorous advertisements have different styles and appeals (Hu, 1998). Research has noticed that in the dissemination of humorous advertisements, audience have different advertising perceptions depending on brand nationality (Madden, 1982). Western humorous advertisements are relatively bold, they can subvert almost everything as tools of humor, whether the national flag or the President (Jiang, 2011). For example, Pepsi launched an advertisement: the queen of England jumped off a building and had party with people, after being thrown to the ground, she continued the party as if nothing had happened.

Chinese humorous advertisements are relatively conservative, as in China, such a subversion advertisement as Pepsi's is legally forbidden. It is difficult for traditional Chinese people to accept the exaggeration and indecency in advertising because they do not meet the aesthetics and requirements of Chinese audiences and may even cause great dislike and resentment (Yue, 2016). The differences in styles and expressions between Chinese and Western humorous advertisements have gradually formed

stereotypes about brand images, with Chinese corporate image being generally more serious and lacking a sense of humor and Western companies being relatively easy and communicative in a humorous way (Chattopadhyay and Basu, 1990). Hence, we predict that,

H1: Audience's attitude towards ads of Chinese brands is more positive than those of US brands.

H2: Americans hold more positive attitude towards Chinese brands than US brands. Chinese attitudes towards Chinese and US brands differ less.

2.1.2 The role of humor tactics

Another important factor that influences the audience's attitudes towards humorous advertising is humorous advertising tactics. In different advertising scenarios, advertisers use different humorous advertising tactics to achieve the desired brand communication goals. Humorous tactics can be categorized into four types: affiliative, self-enhancing, self-defeating and aggressive. Given that the former two are more adaptive and trigger more positive emotions than the latter two (Martin et al., 2003), they are commonly used tactics in advertising practice.

Affiliative humorous ads focus more on others, and are generally used to entertain the audience. By using witty and "harmless" jokes, this type of humorous advertising can reduce the tension in advertising and make people smile when they see an advertisement. Affiliative humorous advertisements focus more on the harmonious relationship between brands and audiences, and entertain audiences by using witty and "harmless" jokes. They take advantage of the generally accepted method of ridicule, which can reduce the audiences' nervousness and achieve the communication goals (Eisend, 2018).

Self-enhancing humorous ads pay more attention to the advertising products per se. This type of ad can be understood as a "self-proclaiming" humorous advertisement. Through the enlargement and exaggeration of the brand benefit, the advertisements strengthen the brand position and promote the brand image (Scott, 1990). Due to the high acceptance of humor by Western consumers and the ubiquity of humor in daily life, the exaggerated expression and humor of self-improvement humorous expressions can make it easier to express their own brand or product performance.

Given that the four styles identified in Martin's humor model were originally formulated in a North American individualistic context, we suggest that Western audiences could favor the self-enhancing humorous advertisements because of the exaggerated expressions focusing on the independent "self." Eastern audiences from collective cultures, however, may differentiate these tactics to a lesser extent, given their interdependent self-construal blurring the boundaries between the self and others (Taher et al., 2008). Indeed, several cross-cultural comparisons show that American participants showed a distinctive positive reaction to self-enhancing humorous style, whereas their counterparts from a collectivistic culture did not show differentiation in their responses to self-enhancing and to affiliative humorous styles (Kazarian & Martin, 2004; 2006; Kuiper et al., 2010). Hence, we predict that,

H3: Americans hold more positive attitude towards ads using self-enhancing tactics than for ads using affiliative tactics. Chinese attitudes towards ads using affiliative tactics and self-enhancing tactics differ less.

2.1.3 The role of Cultural values

In identifying factors that might account for differences in perception and application of humorous advertisements in different countries, many scholars point to the role of cultural values (e.g., Alden, 1993).

One such factor is *humor tolerance*. As a sub-dimension of sense of humor, humor tolerance refers to the extent to which one can tolerate taboos and off-limits topics being the object of humor (Herzog & Strevey, 2008; Yue et al., 2016). People high in humor tolerance regard humor as a natural expression of joy and indispensable spice in recreational, amusement, and social life. They use humor regardless of time, occasion and object of ridicule (Yue et al., 2010). Whereas low humor tolerance cultures emphasize rules and order in social relationships. Humor in public occasions is deemed inappropriate, and being ridiculed or joked in public is sometimes considered an offense (Jiang, 2011; Yue, 2016). Moreover, people from these cultures often think that humor is a characteristic of certain groups, such as comedians. Presenting humorous and interesting images in public does not match their status. What is more, humor is sometimes associated with negative vocabulary such as shallowness and frivolity (Yue, 2010). Higher humor tolerance will lead one to pay more attention to the plot of the advertisement per se; whereas lower humor tolerance will lead one to pay more attention to the humorous stimuli in advertisements. Therefore, we predict that,

H4: Audience higher in humor tolerance hold more positive attitude towards ads using self-enhancing tactics than for ads using affiliative tactics. Attitudes of audience lower in humor tolerance towards ads using affiliative tactics and self-enhancing tactics differ less.

Another cultural factor that is particularly relevant to humor perception is *uncertainty avoidance*. (Eisend, 2011). Among Hofstede's five national cultural dimensions, uncertainty avoidance is the extent to which people feel uncomfortable or threatened by uncertainty and the unknown (Hofstede, 2011). Studies have shown that uncertainty avoidance can influence the effectiveness of humorous advertising (Lee and Lim, 2008; DeMooij, 1998). Consumers with low uncertainty avoidance prefer humor-oriented advertising; whereas consumers with high uncertainty avoidance pay more attention to the advertising information (Hatzithomas et al., 2011). Compared with affiliative advertisements, self-enhancing advertisements are more informative concerning products' core functions. Given that audience high in uncertainty avoidance are motivated to get more reliable information about the product and brand to eliminate uncertainty (Hatzithomas et al., 2011), they should prefer self-enhancing advertisements. While audience low in uncertainty avoidance pay more attention to the content of advertisements, render the effect of tactics less prominent.

H5: Audience higher in uncertainty avoidance prefer self-enhancing to affiliative advertisements. Audience lower in uncertainty avoidance differentiate less.

2.2 Overview

Humor enhances ad related attitudes primary through affective routes (Eisend, 2009; 2011), such that humor triggers an immediate affective response, which then transfers to the ad and the brand (De Houwer et al., 2001; Gelb & Pickett, 1983; Strick et al., 2009). Indeed, a recent meta-analysis shows that humor enhances positive emotions, attitudes towards the ad, and attitudes towards the brand (Eisend, 2009). Therefore, in this research, we focused on the three key metrics of advertising attitudes, including positive emotion (an affective component), humorous level of the ad (e.g., how humorous each ad is—a cognitive component), and consumer connections to brands (e.g., a strong indicator of behavioral intention).

Will audiences from different cultures evaluate the same humorous advertisement differently? If so, could these differences be accounted by differences in cultural values? To these aims, we recruited participants from the US and China that are representative of the Western and the Eastern cultural contexts, and conducted a cross-cultural comparison using a 2 (humorous tactics: affiliative, self-enhancing) * 2 (brand nationality: Chinese brand, Western brand)*(audience nationality: Chinese, US) between-subject design. Furthermore, we considered whether individual differences concerning humor tolerance and uncertainty avoidance could account for cultural differences at the group level.

3 Research Design

3.1. Participants

A total of 506 participants were recruited in this experiment (234 Chinese and 272 Westerners). The Chinese participants were recruited from Chinese biggest online survey website, wjx.com; and the Western participants were recruited from American crowdsourcing marketplace, Amazon MTurk. Our study was approved by the Ethics Review Board of Business School of Central University of Finance and Economics. All participants signed an informed consent form.

Participants were randomly assigned to four experimental conditions. We controlled the IP address to ensure that each volunteer participant only answer the questionnaire once. Average answer time were 512 seconds after removing the cases with extremely short response time (less than 180 seconds). We removed invalid cases with the help of inverse coding questions and obtained 393 valid cases, including 230 Chinese and 163 Westerners.

Table 1 Description of Samples

Chinese Candidates (n=230)			Western Candidates (n=163)		
Variable	n	%	Variable	n	%
Gender			Gender		
Female (=0) *	138	60.0	Female (=0) *	83	50.9
Male (=1)	92	40.0	Male (=1)	80	49.1
Age			Age		
under 18 (=1) *	1	0.4	under 18 (=1) *	-	-
18-25 (=2)	62	27.0	18-25 (=2)	16	9.8
26-30 (=3)	68	29.6	26-30 (=3)	31	19.0
31-40 (=4)	75	32.6	31-40 (=4)	56	34.4
41-50 (=5)	16	7.0	41-50 (=5)	31	19.0
Above 51 (=6)	8	3.5	Above 51 (=6)	29	17.8
Monthly Income (¥)			Monthly Income (\$)		
Under 5000 (=1) *	72	31.3	Under 2000 (=1) *	40	24.5
5001-10000 (=2)	108	47.0	2001-5000 (=2)	85	52.1
10001-20000 (=3)	43	18.7	5001-10000 (=3)	29	17.8
Above 20001 (=4)	7	3.0	Above 20001 (=4)	9	5.5
Note: (1) * control group of category variables (2) The frequency and percentage of variables are reported.					

3.2. Materials and Pretest

The experimental context was print advertisement. We collected 132 pre-test print advertisements from the publications and websites and asked 39 graduate students to evaluate them in terms of levels of innovation, humor, and familiarity. Five graduate students separated them into affiliative advertisements and self-enhancing advertisements. Based on their responses, 6 advertisements were selected for their high consistency and distinctiveness. We then created 6 Chinese virtual brands and 6 Western virtual brands for the advertisements. To provide a realistic setting, the brand name for the advertisements were adapted from real brands, but identifiable characteristics of the brands were removed. At last, we replaced the original brands on the advertisement with the virtual brands using Photoshop and got 12 experimental

advertisements, which belong to one of the 4 conditions in a 2 (humorous advertising tactics: affiliative, self-enhancing) * 2 (brand nationality: Chinese brand, Western brand) design, with 3 advertisements in each cell.

3.3 Measures and Procedure

After participants watched the 3 experimental advertisements, they needed to respond to a survey that comprises of measurements of humor level (Herzog & Strevey, 2008), positive emotion (Philip etc., 2008), self-brand connection (Escalas, 2004), humor tolerance (Herzog & Strevey, 2008) and uncertainty avoidance (Hofstede, 1984). At last, they reported demographics information (e.g., age, gender, and income). All questions were adapted from existing mature scales with the form of seven-point Likert scales (1 = “not at all,” and 7 = “extremely”). Whereas Chinese participants completed a Chinese version of the questionnaire, their US counterparts completed an English version. Accuracy and equivalence of the translation was secured using multiple rounds of back-translation. Reliability analyses showed that all Cronbach’s α s were greater than 0.7. We averaged the scores for positive emotion (an affective component), humorous level of the ad (a cognitive component), and consumer connections to brands (a indicator of behavioral intention) to indicate the attitude towards humorous advertisement (Cronbach’s $\alpha = .869$).

4 Results

4.1. Audience Nationality as Different Cultural Groups

We conducted a univariate analysis of covariance to test the prediction that Chinese audience and the Western audience hold different attitudes towards humorous advertisements depending on humor tactics and brand nationality, controlling for age, gender and income. Table1 displays the results in detail.

Table 2 Attitude model of humorous advertisement

Dependent Variable: Attitude towards humorous advertisements					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	33.543 ^a	10	3.354	4.014	.000
Intercept	425.613	1	425.613	509.320	.000
gender	.243	1	.243	.290	.590
age	.768	1	.768	.919	.338
incoming	6.276	1	6.276	7.510	.006
Brand nationality	8.460	1	8.460	10.124	.002
Advertising tactics	2.502	1	2.502	2.994	.084
Audience nationality	.889	1	.889	1.064	.303

Brand nationality * Advertising tactics	.285	1	.285	.341	.560
Brand nationality * Audience nationality	9.562	1	9.562	11.443	.001
Advertising tactics * Audience nationality	11.617	1	11.617	13.902	.000
Brand nationality * Audience nationality * Audience nationality	.951	1	.951	1.139	.287
Error	319.218	382	.836		
Total	7965.847	393			
Corrected Total	352.761	392			
a. R Squared = .095 (Adjusted R Squared = .071)					

Result showed that the main effect of brand nationality was significant, $F(1,382) = 10.124$, $p < .01$. Audience held more positive attitude towards Chinese brands than Western brands, confirming Hypothesis 1.

As Hypothesis 2 suggested, audience nationality significantly interacted with brand nationality $F(1, 382) = 11.443$, $p < 0.01$ (Figure 1). Simple main effect analyses showed that Western audience held more positive attitude towards Chinese brands than towards Western brands ($F(1,382) = 18.30$, $p < .001$); whereas Chinese audience did not differentiate, $F(1,382) = .032$, $p > .05$.

Insert Figure 1 Here

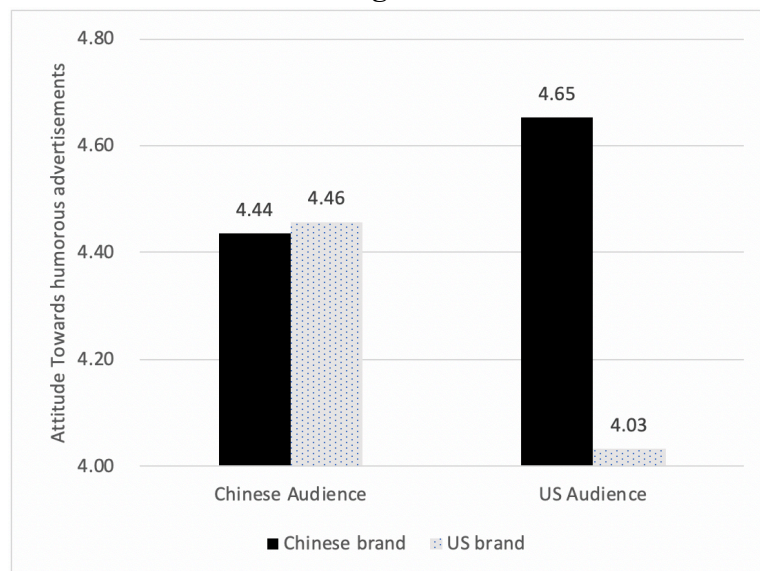


Figure 1 Attitude difference in brand nationality with different audience nationality

As Hypothesis 3 suggested, audience nationality significantly interacted with humor tactics, $F(1,382) = 13.902$, $p < .001$; (Figure 2). Simple main effect analyses showed that Western audience held more positive attitude towards self-enhancing ads

than towards affiliative ads, $F(1,382) = 12.629, p < .001$; whereas Chinese audience did not differentiate. No other effects were significant.

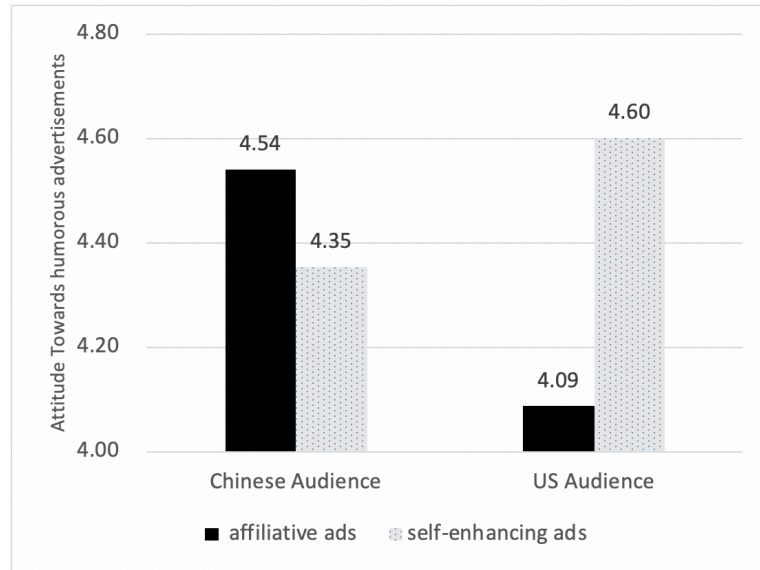


Figure 2 Attitude difference in advertising tactics with different audience nationalit

4.2. Humor tolerance as a cultural moderator

Humor tolerance is an important cultural factor that influence the way audience perceive and react to humorous advertisements. We categorized participants into high and low humor tolerant groups based on mean level of humor tolerance. We conducted a univariate analysis of covariance to test the prediction that audiences with different humor tolerance hold different attitudes towards humorous advertisements depending on humor tactics and brand nationality, controlling for age, gender and income. Table 2 displays the results in detail.

Result showed that the main effect of brand nationality was significant, $F(1,382) = 7.722, p < .01$. Audience held more positive attitude towards Chinese brands than Western brands, confirming Hypothesis 1.

As Hypothesis 4 suggested, humor tolerance significantly interacted with humor tactics $F(1, 382) = 4.805, p < 0.5$ (Figure 3). Simple main effect analyses showed that audience high in humor tolerance held more positive attitude towards humorous ads than audience low in humor tolerance ($F(1,382) = .534, p < .001$); whereas audience low in humor tolerance did not differentiate, $F(1,382) = .384, p > .05$.

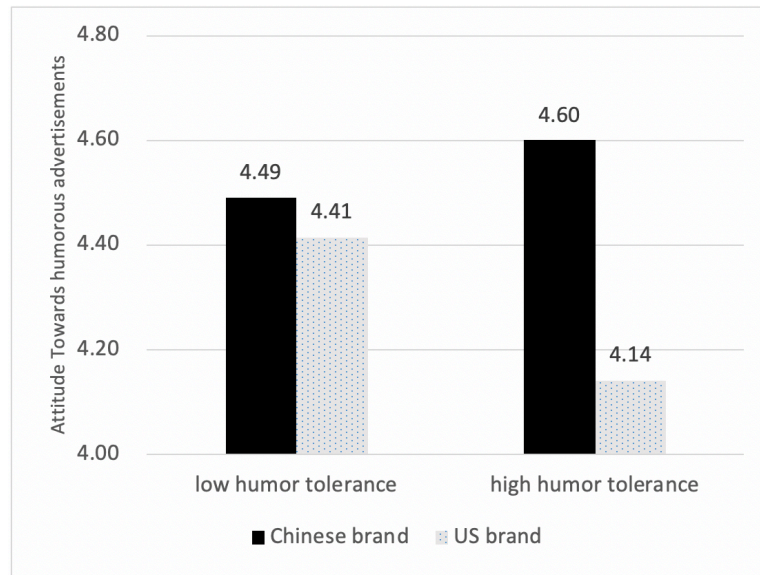


Figure 3 Attitude difference in brand nationality with different levels of humor tolerance

We also found a significant interaction of humor tolerance and brand nationality, $F(1, 382) = 3.915, p < 0.05$ (Figure 4). Simple main effect analyses showed that audience high in humor tolerance held more positive attitude towards self-enhancing ads than affiliative ads ($F(1,382) = 9.801, p < .01$); whereas Chinese audience did not differ, $F(1,382) = .363, p > .05$.

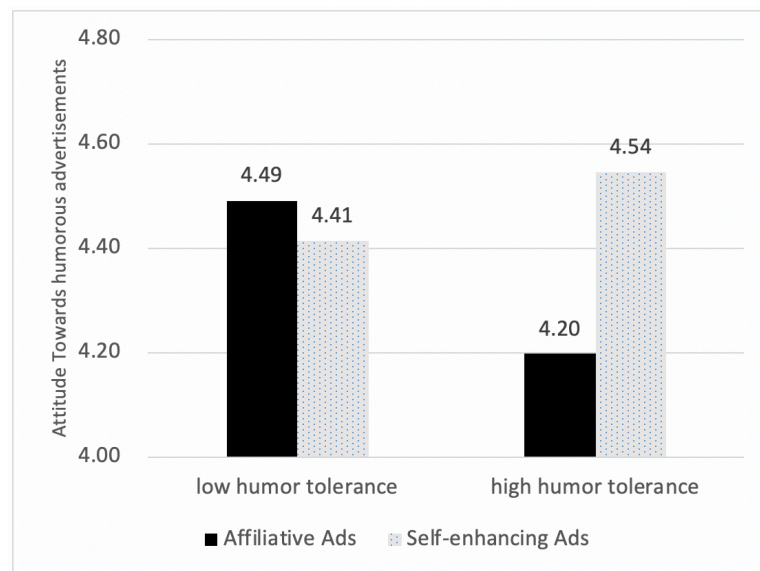


Figure 4 Attitude difference in advertising tactics with different levels of humor tolerance

4.3. Uncertainty avoidance as a cultural moderator

Uncertainty avoidance is another important cultural factor that has been shown to influence the way audience perceive and react to humorous advertisements. We

categorized participants into high and low uncertainty avoidant groups based on mean level of uncertainty avoidance and conducted a univariate analysis of covariance to test the prediction that audiences with different uncertainty avoidance hold different attitudes towards humorous advertisements depending on humor tactics and brand nationality, controlling for age, gender and income. Table3 displays the results in detail.

Result showed that the main effect of brand nationality was significant, $F(1,382) = 7.297, p < .01$. Audience held more positive attitude towards Chinese brands than Western brands, confirming Hypothesis 1.

As Hypothesis 5 suggested, uncertainty avoidance significantly interacted with humor tactics, $F(1, 382) = 4.588, p < 0.05$ (Figure 5). Simple main effect analyses showed that high uncertainty avoidant audience held more positive attitude towards self-enhancing ads than affiliative ads ($F(1,382) = 5.244, p < .05$); whereas low uncertainty avoidant audience did not differentiate, $F(1,382) = .514, p > .05$.

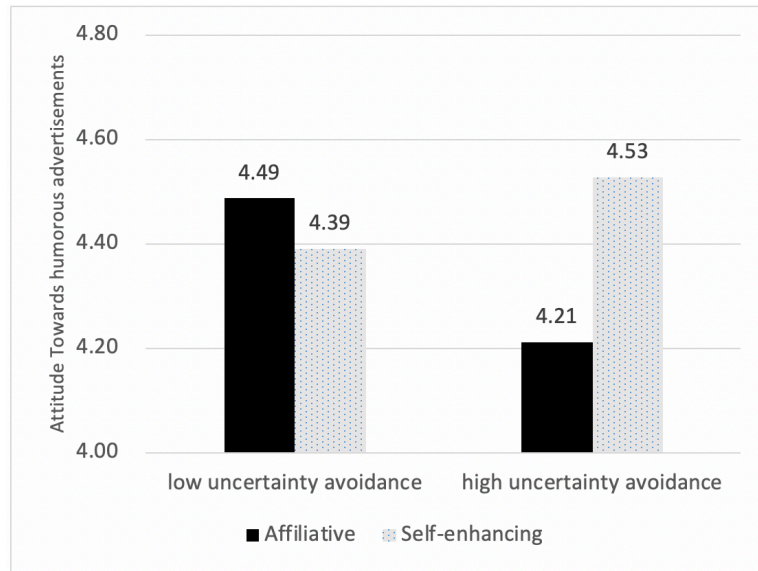


Figure 5 Attitude difference in advertising tactics with different levels of uncertainty avoidance

The interaction of uncertainty avoidance and brand nationality was marginally significant, $F(1, 382) = 2.208, p = .138$ (Figure 6). Simple main effect analyses showed that high humor tolerant audience held more positive attitude towards Chinese brands than Western brands, $F(1,382) = 8.471, p < .01$; whereas low humor tolerant audience did not differ, $F(1,382) = .766, p > .05$.

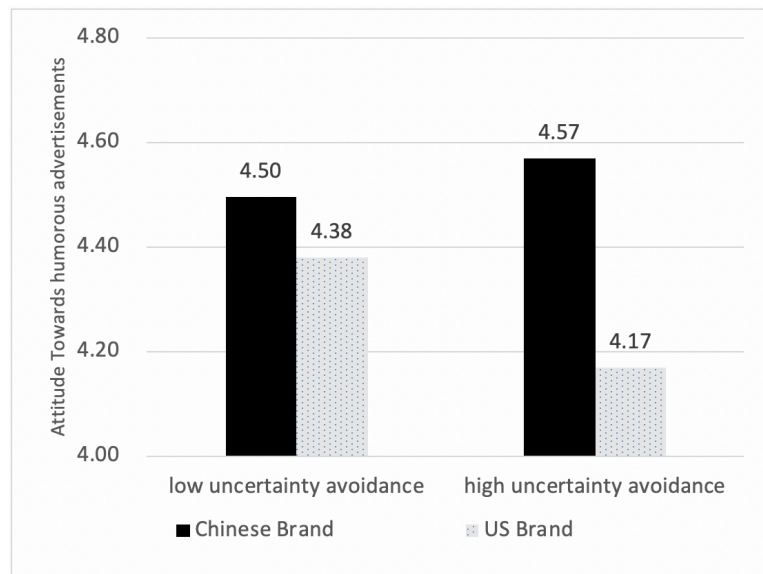


Figure 6 Attitude difference in brand nationality with different levels of uncertainty avoidance

4.4. Incremental Contribution of Cultural Values above Audience Nationality

To test whether individual level variance in cultural values could fully explain and substitute the effect of ethnic cultural groups, we conducted a multilevel linear regression on attitudes towards humorous advertisement. Table 4 shows the results in detail. A model tested earlier in the MANCOVA explains 7.1% of the total variance in attitudes towards humor advertisement (Model 3). Taking humor tolerance and uncertainty avoidance into account don't make any significant contribution, $F(2, 381) = .209, \Delta R^2 = .001, p > .05$ (model 4). The same was true after interaction terms of cultural values and humor tactics, and cultural values and brand nationality were entered into the model, $F(4, 377) = .355, \Delta R^2 = .003, p > .05$ (model 5). These results suggest that audience nationality related effects found in 4.1 could not be explained or substituted by individual variance in humor tolerance and uncertainty avoidance.

Table 3 Attitude model of cultural values above audience nationality

Dependent Variable: Attitude towards humorous advertisements															
	Model1			Model2			Model3			Model4			Model5		
	B	SE	t	B	SE	t	B	SE	t	B	SE	t	B	SE	t
(Constant)	4.298	0.18	23.831	4.495	0.267	16.809	4.325	0.518	8.349	4.376	0.529	8.264	4.4	0.567	7.767
gender	0.005	0.097	0.05	0.015	0.097	0.149	0.054	0.095	0.567	0.063	0.096	0.651	0.056	0.097	0.581
age	-0.05	0.04	-1.234	-0.032	0.043	-0.742	-0.042	0.042	-1.013	-0.044	0.043	-1.023	-0.038	0.043	-0.883
incoming	0.143*	0.061	2.333	0.144*	0.061	2.347	0.168**	0.06	2.798	0.17**	0.06	2.819	0.174**	0.061	2.845
Brand nationality				-0.232*	0.095	-2.44	0.133	0.302	0.439	0.118	0.304	0.387	0.173	0.321	0.539
Advertising tactics				0.087	0.095	0.918	-0.074	0.305	-0.244	-0.097	0.308	-0.315	-0.16	0.317	-0.504
Audience nationality				-0.117	0.103	-1.131	-0.185	0.403	-0.46	-0.151	0.408	-0.369	-0.102	0.476	-0.214
Brand nationality* Advertising tactics							-0.074	0.185	-0.399	-0.061	0.187	-0.326	-0.077	0.189	-0.408
Brand nationality* Audience nationality							-0.646**	0.19	-3.404	-0.644**	0.19	-3.387	-0.565*	0.229	-2.464
Advertising tactics* Audience nationality							0.697***	0.188	3.706	0.7***	0.189	3.704	0.587*	0.229	2.563
Uncertainty avoidance										-0.033	0.099	-0.332	-0.204	0.414	-0.494
Humor tolerance										-0.061	0.111	-0.553	-0.085	0.463	-0.184
Humor tolerance* Brand nationality													-0.083	0.221	-0.374
Humor tolerance* Advertising tactics													0.099	0.223	0.445

Uncertainty avoidance*					0.201	0.198	1.015
Advertising tactics							
Uncertainty avoidance*					-0.086	0.196	-0.439
Brand nationality							
<i>F</i>	2.086	2.363*	4.332***	3.568***	2.693**		
Adj. R ²	.008	.020*	.071	.067***	.061**		

5 General Discussion

Humor is an important appeal used in commercial advertising. In the era of globalization, how to carry out humorous advertisements in countries with different cultural backgrounds is a major challenge for enterprises. Answering this call, the current study explored the impact of characteristics of humorous advertisements on audience attitudes toward humorous advertisements in a cross-cultural research framework. The results suggest that the attitudinal differences between Chinese audience and US audience do not lie at the aggregate level. In other words, we didn't find a main effect of audience nationality. Instead, the differences lie in audience's sensitivity/responsiveness to characteristics of the ads. For example, whereas US audience showed a strong preference for ads of Chinese brand to those of US brands, Chinese audience did differentiate them. Whereas US audience preferred ads using self-enhancing tactics to those using affiliative tactics, again Chinese audience didn't differentiate. These findings coincide with the "culture-bound" humor use effect as suggested by Kuiper et al. (2010), such that a preference for self-enhancing humor tactics is more prevalent in the North American individualistic culture.

Given past research suggests that "...between country differences are not so large as to preclude successful use of humor in standardized advertising" (Gregory & Crawford, 2011, p. 239), we also explored whether individual differences in cultural values could account for the effect of audience nationality. Similar interaction patterns were obtained when we replaced audience nationality with humor tolerance, and uncertainty avoidance, respectively. Specifically, the results of high humor tolerant audience and high uncertainty avoidant audience parallel that of US audience, such that they showed significant preferences for ads of Chinese brands and with self-enhancing tactics. Whereas the result of low humor tolerant audience and low uncertainty avoidant audience parallel that of Chinese audience, such that they showed no preference for either brand nationalities or for either humor tactics. We further conducted a multilevel linear regression to test incremental contribution of cultural values on and above audience nationality related effects. The results showed that taking humor tolerance and uncertainty avoidance into account don't make any significant contribution. The same is true after interaction terms of cultural values and humor tactics, and cultural values and brand nationality were entered into the model. More importantly, audience nationality related effects remained significant, suggesting that differences embedded in culture groups, as indicated by audience nationality, could not be explained or substituted by individual variance in humor tolerance and uncertainty avoidance.

The current research offers important managerial implications by highlighting the attitudinal differences between Chinese and Americans. That is, the differences do not lie at the aggregate level; instead, whereas Chinese are not responsive towards advertisements with different brand nationalities and humor tactics, Americans are rather sensitive. This sensitivity is cultivated by intensive and chronically exposure to

modern advertising commercials. In fact, as early as 29 years ago, “on any given day, the average American is exposed to about 300 ad messages. That is 9,900 a month, or 109,500 a year” (McCarthy, 1991). Therefore, we suggest that for humor appeals and other characteristics of an ad to take effect in countries that show lower sensitivity or responsiveness, cultivating a modern commercial culture takes priority over the field. This is especially true when MNCs are expanding to overseas markets.

This study is not without limitations. First, we built our research framework on the assumption that Chinese and American share a common understanding of a humor, without directly testing it. In fact, this is true only for the types of humor that employ punchlines that are relatively universal (Rober, 2005). Given knowledge about products and brand nationalities shared by one country may differ tremendously from that of another country, it is highly probable that differences in attitudes are caused by differences in understanding. Second, although we used a 2*2*2 semi-experimental design, we did not find a significant three-way interaction or a two-way interaction of brand nationality and humor tactics, questioning the value of the brand nationality*humor tactics orthogonal design. Last but not least, although we developed our hypotheses based heavily on the distinction in collective and individualistic self-construals, we did not directly test them. As a potential mediator, collective and individualistic self-construals may covary with cultural values, such as humor tolerance and uncertainty avoidance, to some extent, but may not perfectly overlap. This might be the reason that we failed to find any mediation roles played by humor tolerance or by uncertainty avoidance.

Economic globalization has provided cross-cultural research on humorous advertising broader opportunities than ever, and future research could focus on the following aspects. First, millennial young adults are more exposed and sensitive to social media, it is highly probable that their cultural values are shaped differently from their parents, and the sub-culture they shared could influence their reactions and attitudes towards humorous advertisements. Future research could compare participants from different generations and observe the effect of differences between sub-cultures on attitudes towards humorous advertisements. Second, future research could investigate other variables that might affect audience attitude towards advertising, such as social media influences and aesthetic stimuli (Buijzen and Valkenburg, 2004). Furthermore, in recent years, online advertising has become more widespread around the globe, and future research can be extended to online display advertisements and online video advertisements.

AUTHOR CONTRIBUTIONS

All authors conceptualized the manuscript, YW and JL wrote the first complete draft, SL contributed additional writing, YW and JL contributed data collection and analysis, SL contributed to further analysis, and all authors edited the manuscript and approved

the final version. YW and SL contributed equally to this work, are co-first authors, JL is corresponding author.

FUNDING

The current work was supported by National Natural Science Foundation of China awarded to Yi WANG (No. 71472192) and Su LU (No.71401036), and “the Fundamental Research Funds for the Central Universities”.

REFERENCE

- Alden, D. L., Hoyer, W. D., & Lee, C. (1993). Identifying global and culture-specific dimensions of humor in advertising: A multinational analysis. *The Journal of Marketing*, 64-75.
- Beard, F. K. (2005). One hundred years of humor in American advertising. *Journal of Macromarketing*, 25(1), 54-65.
- Buijzen, M., & Valkenburg, P. M. (2004). Developing a typology of humor in audiovisual media. *Media psychology*, 6(2), 147-167.
- Chattopadhyay, A., & Basu, K. (1990). Humor in advertising: The moderating role of prior brand evaluation. *Journal of Marketing Research*, 466-476.
- Duncan, C. P. (1979). Humor in advertising: A behavioral perspective. *Journal of the Academy of Marketing Science*, 7(3), 285-306.
- Eisend, M. (2018). Explaining the use and effects of humour in advertising: an evolutionary perspective. *International Journal of Advertising*, 37(4), 526-547.
- Eisend, M. (2011). How humor in advertising works: A meta-analytic test of alternative models. *Marketing letters*, 22(2), 115-132.
- Escalas, J. E. (2004). Narrative Processing: Building Consumer Connections to Brands. *Journal of Consumer Psychology*, 14, 168–80.
- Gable, P. A., & Harmon-Jones, E. (2008). Approach-motivated positive affect reduces breadth of attention. *Psychological Science*, 19(5), 476-482.
- Gary D Gregory and Heather J Crawford (2011) ,"Cross Cultural Responses to Humorous Advertising: an Individual Difference Perspective", in *AP - Asia-Pacific Advances in Consumer Research Volume 9*, eds. Zhihong Yi, Jing Jian Xiao, and June Cotte and Linda Price, Duluth, MN : Association for Consumer Research, Pages: 239-245.
- Hatzithomas, L., Zotos, Y., & Boutsouki, C. (2011). Humor and cultural values in print advertising: a cross-cultural study. *International Marketing Review*, 28(1), 57-80.
- Herzog, T. R., & Strevey, S. J. (2008). Contact with nature, sense of humor, and psychological well-being. *Environment and Behavior*, 40(6), 747-776.
- Hofstede, G., & Bond, M. H. (1984). Hofstede's culture dimensions: An independent validation using Rokeach's value survey. *Journal of cross-cultural psychology*, 15(4), 417-433.

- Hu, C., and Huang D. (1998). Zhong guo guang gao, wei shen me bu you mo? you mo guang gao cheng yin fen xi [China Advertising, Why Not Humor? Analysis of the Causes of Humorous Advertising]. *Chinese Advertising*, (01): 23-24
- Jiang, F., Yue, X. D., & Lu, S. (2011). Different attitudes toward humor between Chinese and American students: evidence from the Implicit Association Test. *Psychological reports*, 109(1), 99-107.
- Kazarian, S. S., & Martin, R. A. (2004). Humour styles, personality, and well - being among Lebanese university students. *European journal of Personality*, 18(3), 209-219.
- Madden, T. J., & Weinberger, M. G. (1982). The effects of humor on attention in magazine advertising. *Journal of Advertising*, 11(3), 8-14.
- Kuiper, N. A., Kazarian, S. S., Sine, J., & Bassil, M. (2010). The impact of humor in North American versus Middle East cultures. *Europe's Journal of Psychology*, 6(3), 149-173.
- McCarthy, Michael J. (1991), "Marketing in the '90s (A Special Report) Mind Probe: What Makes an Ad Memorable? Recent Brain Research Yields Surprising Answers," *Wall Street Journal*, March 22, sec. B, 3.
- Robert, C. (2005, August). Why Would A Duck Walk Into A Bar? A Theoretical Examination Of Humor And Culture In Organizations. In *Academy of Management Proceedings* (Vol. 2005, No. 1, pp. U1-U6). Briarcliff Manor, NY 10510: Academy of Management.
- Scott, C., Klein, D. M., & Bryant, J. (1990). Consumer response to humor in advertising: A series of field studies using behavioral observation. *Journal of Consumer Research*, 16(4), 498-501.
- Spotts, H. E., Weinberger, M. G., & Parsons, A. L. (1997). Assessing the use and impact of humor on advertising effectiveness: A contingency approach. *Journal of advertising*, 26(3), 17-32.
- Sternthal, B., & Craig, C. S. (1973). Humor in advertising. *The Journal of Marketing*, 12-18.
- Weinberger, M. G., & Gulas, C. S. (1992). The impact of humor in advertising: A review. *Journal of advertising*, 21(4), 35-59.
- Yue, X. D. (2010). Exploration of Chinese humor: Historical review, empirical findings, and critical reflections. *Humor Int. J. Humor Res.* 23, 403–420.
- Yue, X., Jiang, F., Lu, S., & Hiranandani, N. (2016). To be or not to be humorous? Cross cultural perspectives on humor. *Frontiers in psychology*, 7, 1495.
- Zhou, X. (2008). You mo guang gao su qiu ji qi chuan bo xiao guo [Humorous Advertising Appeal and Its Communication Effect]. *Psychological Science Progress*, (06): 955-963.